

Hill Air Force Base, Utah

Environmental Restoration Management Action Plan — 2000

June 2001

Environmental Restoration Management Action Plan for Hill Air Force Base, Utah

JUNE 2001

Prepared For:

Environmental Restoration Division OO-ALC/EMR Hill Air Force Base, Utah 84056

Prepared By:

Montgomery Watson 4525 South Wasatch Blvd., Suite 200 Salt Lake City, Utah 84124

U.S. Air Force Project Staff Hill Air Force Base

Environmental Management Director

Allan Dalpias

Restoration Division

Bob Elliott—Chief

Shane Hirschi—Remedial Project Manager

Operations Team

Jeff Watkins Program Manager for OU 1, OU 2, OU 3, OU 4, OU 5, OU 6, and OU 7

Mike Hays Basewide Sampling

Ray Spencer Construction, Operations and Maintenance Manager OU 1 and OU 2

Oscar Torres Caps, OU 4, OU 5, OU 6, and OU 8 Groundwater Systems O&M

Investigations Team

Steven Hicken Program Manager for OU 5, OU 8, OU 9, Lt. Mtn. and UTTR, Range Rule, IDW Mgt.

Kyle Gorder Little Mountain, UTTR-S, UTTR-N, Wendover

Shannon Hayhurst Project Manager OU 9, OU 10, UST Remedial Actions

Mark Loucks Project Manager OU 5, Staff Hydrogeologist

Robert Petrie Project Manager OU 8

Sheri Rolfsness Project Manager, OU 11, Current Year Funding

Support Staff

Jon Ginn GIS Engineer, dBase Mgmt., Remote Data Systems
Ross Hammond Real Estate, IDW Labels, Administrative Record

Mark Holt GIS Engineer

Dan Stone UST Compliance

Annie Williams Restoration Advisory Board

Table of Contents

		Page
1.0	Introduction	1-1
	1.1 Purpose1.2 Environmental Management Directorate1.3 Restoration Division Mission and Vision1.4 IRP Objectives	1-1 1-1 1-1 1-2
2.0	Restoration Program Status	2-1
	 2.1 Introduction 2.2 Historical Overview of Hill AFB 2.3 Regulatory Framework 2.3.1. Regulatory History 2.3.2. Current Regulatory Framework 2.4 Environmental Condition of Property 2.4.1. Hill AFB 2.4.2. Utah Test and Training Range 2.4.3. Wendover Air Force Auxiliary Field 2.4.4. Little Mountain Test Annex 2.5 Community Involvement 2.6 Funding and Schedule 2.6.1. Funding 2.6.2. Schedules 	2-1 2-1 2-2 2-2 2-3 2-3 2-3 2-8 2-8 2-8 2-8 2-55 2-55
3.0	Strategies	3-1
	 3.1 Stakeholder Involvement 3.2 Project Staffing 3.3 Contracting 3.4 Priorities (Worst First) 3.5 Life Cycle Costing 3.6 Innovative Technologies 3.7 Reduction in Operation and Maintenance Costs 3.8 Data Management 3.9 Range and Other Property Cleanups 3.10 Paperless Reporting 3.11 Performance Monitoring and Verification 	3-1 3-1 3-1 3-2 3-2 3-2 3-2 3-2 3-3 3-3
4.0	Issues	
	4.1 Real Estate4.2 Monitored Natural Attenuation4.3 Regulatory Interfaces4.4 Technical Staffing	4-1 4-1 4-1 4-2

Table of Contents

APPENDIXA	- Historical and Future Restoration Funding
APPENDIX B	- Program Team and Peer Reviewers
APPENDIX C	- Decision Documents and Records of Decision
APPENDIX D	- Remedial Actions, Interim Remedial Actions, and Technical Demonstration
APPENDIX E	- Areas of Concern at UTTR
APPENDIX F	- Hill Air Force Base Environmental Setting
APPENDIX G	- EMR Technical Documents Summary

List of Tables

TABLE NO.	TITLE	Page
2-1	IRP Program Status Summary	2-4
2-2	NFRAP IRP Site Summary	2-5
2-3	Restoration Advisory Board Members	2-9
2-4	FY00 IRP Budget	2-56

List of Figures

FIGURE

NO.	TITLE	Page
1-1 1-2	Location of Hill AFB and Major Off-Base Properties EM Organization Structure	1-5 1-2
2-1 2-2 2-3 2-4 2-5	Current and Historical Hazardous Substance Activities Location of IRP UST Sites Environmental Condition of Hill AFB Property Areas of Soil Contamination and Active Remedial Actions Areas of Ground-Water Contamination and Active Remedial Actions	2-11 2-12 2-13 2-14 2-15
Major IF	P Site Fact Sheets:	
2-6a 2-6aa 2-6bb 2-6c 2-6cc 2-6dc 2-6dd 2-6e 2-6ee 2-6f 2-6f 2-6f 2-6g 2-6h 2-6i 2-6i 2-6i 2-6i 2-6i 2-6i 2-6i 2-6i	Operable Unit 1 (IRP Sites FT009, FT081, LF001, LF003, OT014, WP002, WP080) Operable Unit 1 (Project Schedule) Operable Unit 2 (IRP Sites SS021, WP007) Operable Unit 2 (Project Schedule) Operable Unit 3 (IRP Sites SD023, SD034, SD046, ST004, ST018, WP005, WP006) Operable Unit 3 (IRP Sites SD023, SD034, SD046, ST004, ST018, WP005, WP006) Operable Unit 4 (IRP Sites LF011, LF012, OT020, OT041, OT042) Operable Unit 4 (IRP Site SD016) Operable Unit 5 (IRP Site SD016) Operable Unit 5, IRP Site SD016 (Project Schedule) Operable Unit 5 (IRP Site SS017, SS091) Operable Unit 6 (IRP Sites ST022, OT026) Operable Unit 6 (IRP Sites ST022, OT026) Operable Unit 7 (IRP Sites SS027, ST031, SS032) Operable Unit 7 (Project Schedule) Operable Unit 8 (IRP Site SC022, SS093, SS094, SS095, SS106) Operable Unit 9 (IRP Sites SD040 and SS090) Operable Unit 10 (IRP Sites SD040 and SS090) Operable Unit 11 (IRP Sites SS090 and OT097) Operable Unit 11 (IRP Sites SS090) Operable Unit 11 (IRP Sites SS090) Operable Unit 11 (IRP Sites SS090) Operable Unit 11 (IRP Sites SC090) Operable Unit 11 (IRP Sites SS090) Operable Unit 11 (IRP Sites SC090)	2-17 2-18 2-19 2-20 2-21 2-22 2-23 2-24 2-25 2-26 2-27 2-28 2-29 2-30 2-31 2-32 2-33 2-34 2-35 2-36 2-37 2-38 2-39 2-40 2-41 2-42 2-43
2-6nn 2-6o 2-6oo	Building 43 (Project Schedule) Building 914 (IRP Site ST071) Building 914 (Project Schedule)	2-44 2-45 2-46
2-6q 2-6qq 2-6r 2-6rr 2-6s 2-6ss 2-6p	Little Mountain Test Annex (IRP Site WP008) Little Mountain Test Annex (Project Schedule) UTTR-North (IRP Sites OT019, WP025, Ot104, and OT105) UTTR-North (Project Schedule) UTTR-South (IRP Sites OT102 and OT103) UTTR-South (Project Schedule) Wendover Air Force Auxiliary Field (IRP Site LF058 and other AOCs)	2-47 2-48 2-49 2-50 2-51 2-52 2-53
2-6p 2-6pp 2-7	Wendover Air Force Auxiliary Field (IRP Site LF058 and other AOCS) Wendover Air Force Auxiliary Field (Project Schedule) Distribution of EMR Funding	2-53 2-54 2-57

List of Acronyms

ACL Alternate Concentration Limit
ACM Asbestos Containing Material

A-E Architect-Engineer
AFB Air Force Base

AFCEE Air Force Center for Environmental Excellence

ANSC Areas of No Suspected Contamination

AO Approval Order
AOC Areas of Concern

ASC Abatement and Site Characterization

AST Aboveground Storage Tank

ARAR Applicable or Relevant and Appropriate Requirement ATSDR Agency for Toxic Substances and Disease Registry

CAP Corrective Action Plan

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CRP Community Relations Plan

CWA Clean Water Act
DCA Dichloroethane
DCE Dichloroethene
DD Decision Document

DERP Defense Environmental Restoration Program

DNAPL Dense Non-Aqueous Phase Liquid

DOD Department of Defense

DRMO Defense Reutilization Marketing Office

ECAMP Environmental Compliance and Management Program

ECS Environmental Construction Service

EIMS Environmental Information Management System

EM Environmental Management Directorate

EMC Environmental Management Directorate, Compliance Division EMR Environmental Management Directorate, Restoration Division

EMP Environmental Management Directorate, Pollution Prevention and Planning Division

EOD Explosive Ordnance Disposal

ERPIMS Environmental Restoration Program Information Management System

EPA United States Environmental Protection Agency

EPC Environmental Protection Committee
ERP Environmental Restoration Program

°F Degrees in Fahrenheit FFA Federal Facilities Agreement

FS Feasibility Study
FY Fiscal Year

GIS Geographical Information System
GWP Utah Ground Water Protection Program

Hill AFB Hill Air Force Base

HMMS Hazardous Materials Management System

IAG Inter-Agency Agreement
ICBM Intercontinental Ballistic Missile

IRA Interim Remedial Action

IRA-C Interim Remedial Action-Construction
IRA-O Interim Remedial Action-Operation
IRP Installation Restoration Program

IRPIMS Installation Restoration Program Information Management System

IWTP Industrial Wastewater Treatment Plant

LAN Local Area Network

LNAPL Light Non-Aqueous Phase Liquid

LTM Long Term Monitoring
LTO Long Term Operations
MAP Management Action Plan
MCL Maximum Contaminant Level

NA Not Applicable

NCP National Oil and Hazardous Substances Pollution Contingency Plan

ND No Document

NDCSD North Davis County Sewer District
NEPA National Environmental Policy Act

NESHAPs National Emission Standards for Hazardous Air Pollutants

NFRAP No Further Response Action Planned

NP Not Prioritized
NPL National Priority List
O&M Operation & Maintenance
OO-ALC Ogden Air Logistics Center

OU Operable Unit

PA Preliminary Assessment

PA/SI Preliminary Assessment/Site Inspection

PCB Polychlorinated Biphenyl

PCE Perchloroethelene (Tetrachloroethene)
POTW Publicly-Owned Treatment Works

PP Proposed Plan RA Remedial Action

RA-O Remedial Action-Operation
RAB Restoration Advisory Board
RAC Remedial Action Construction

RCRA Resource Conservation and Recovery Act

RD Remedial Design

RD/RA Remedial Design/Remedial Action

RI Remedial Investigation

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

SARA Superfund Amendments and Reauthorization Act

SVE Soil Vapor Extraction
TCA Trichloroethane
TCE Trichloroethene

TIS Technical Information System
TPH Total Petroleum Hydrocarbons
TSCA Toxic Substances Control Act

UDEQ Utah Department of Environmental Quality

UDERR Utah Department of Environmental Quality/Division of Environmental Response and Remediation

UDOH Utah Department of Health

µg/l micrograms per liter (approximately equivalent to parts per billion)

Unkn Unknown

UPDES Utah Pollution Discharge Elimination System

UST Underground Storage Tank
UTTR Utah Test and Training Range
WAFAF Wendover Air Force Auxiliary Field